



CHARACTERISTICS

- THE TWO OUTPUTS ARE COMBINED BY REPLACING THE ADAPTER
- AVAILABLE WITH SINGLE AND DOUBLE OUTLETS
- AIR EXHAUST VALVES INCORPORATED IN BOTH SIDES OF THE BASE
- AVAILABLE WITH THREAD: BSP
- OPERATING PRESSURE: UP TO 500 BAR
- OIL AND GREASE FUNCTION
- SAFE AND CONTROLLED LUBRICATION
- EASY AND FLEXIBLE ASSEMBLY WITH LOW MAINTENANCE COSTS
- POSSIBILITY OF SUBSTITUTING THE METERING ELEMENTS WITHOUT BLOCKING THE PIPEWORK

APPLICATIONS

- ANY OIL AND GREASE LUBRICATION SYSTEM

SMX PROGRESSIVE MODULAR DIVIDERS MADE OF AISI 316 AND AISI 303 STAINLESS STEEL

The **SMX INOX AISI 316 AND AISI 303** modular dividers are capable of guaranteeing precise lubrication while maximising the efficiency of lubrication systems.

The divider consists of two main parts:

- **THE BASE** (consisting of a minimum of three elements)
- **METERING VALVES**

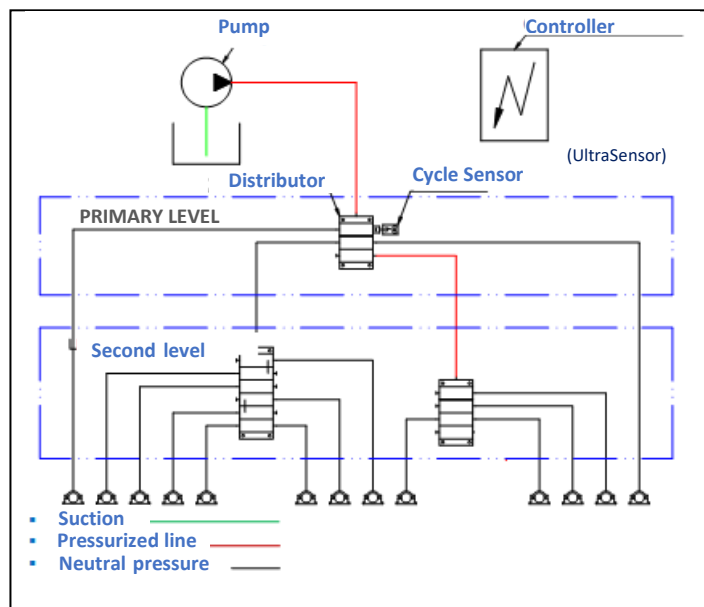
To maximize the performance of the system, it is crucial to use **electrical monitoring elements** that detect malfunctioning or system blockage.

Thanks to its **modularity**, the system can be easily expanded and replacement of metering elements can occur without removing the pipework, thereby guaranteeing low maintenance costs. The modularity of the dividers furthermore allows you to bundle lubrication points according to system requirements.

The **SMX INOX AISI 316 AND AISI 303** dividers have been designed to be used in environments where a high risk of metal parts oxidising exists, typical in the food or maritime sectors.



OPERATING PRINCIPLE



The system is easily expandable and the modular concept permits its replacement at low cost.

The diagram shows a progressive system, where the lubricant is pumped into a single input of a "progressive divider" (master divider), and is divided by volume into a number of points through the progressive movement of the pistons arranged in sequence.

The cycle is controlled by the UltraSensor monitoring element.

TECHNICAL CHARACTERISTICS

Inlet thread	1/4 BSP
Outlet thread	1/8 BSP
Max. pressure	500 bar
Permitted lubricants	Grease and oil

THE BASICS

THE BASE CONSISTS OF A MINIMUM OF **THREE ELEMENTS**. INITIAL, INTERMEDIATE AND FINAL BASE

For assembling, it is essential to know the number of outlets required to lubricate the system in order to identify the number of useful items.

An unlimited number of elements can be added to the bases.

The assembly and the replacement of the metering elements is very simple:

- Position the valve on its base.
- Insert fastening screws.
- Tighten them.

The elements can be assembled simply, without having to remove the pipework.

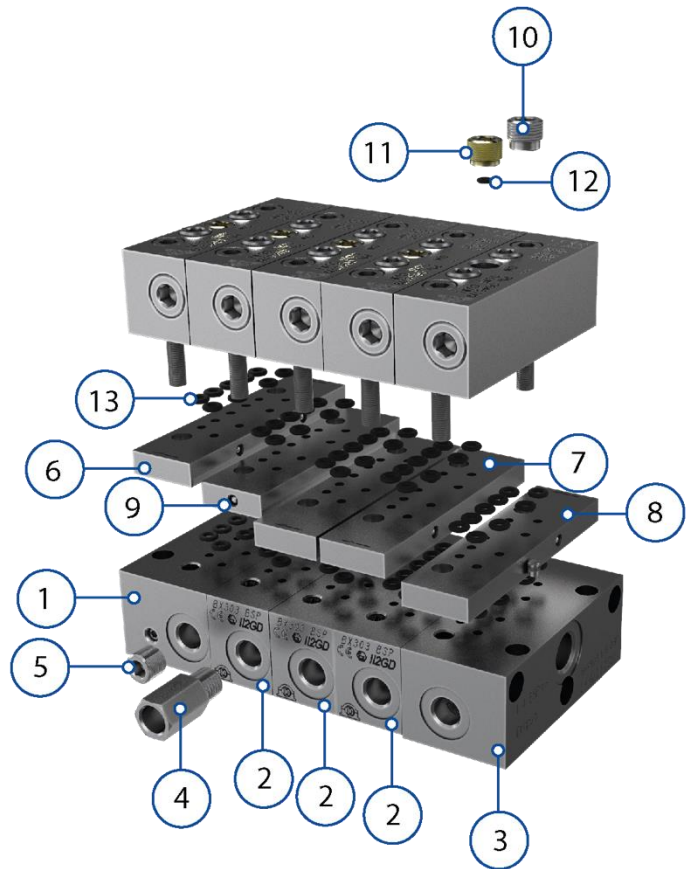
During assembly, pay attention to the O-rings situated on the side of the base.

Thanks to the bridge plates, it is possible to transfer the flow rate of one metering valve to the next one.

They must be ordered at the base on the side of the outlet that you want to add, for example, a right bridge, left bridge or left/right bridge for both.

The side of the bridge element is indicated directly on the piece by an arrow that indicates the outlet connected to the following one.

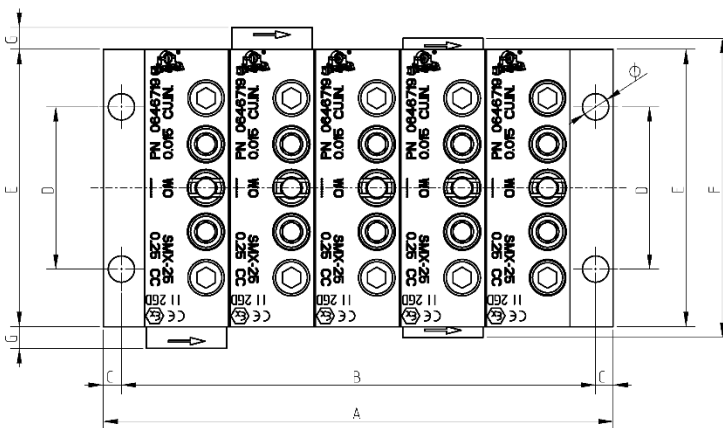
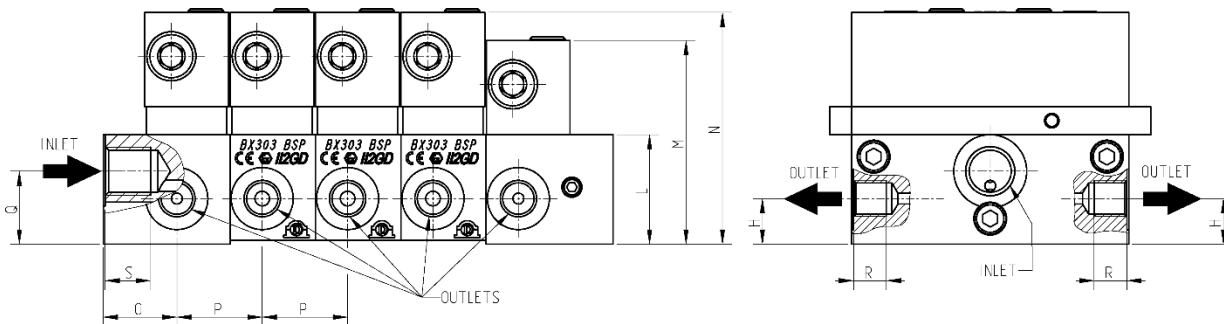
For assembly, position the bridge plate on the base; connect the metering valve and used two fastening screws supplied with the bridge element to fasten everything.



POSITION	DESCRIPTION	PART NUMBERS AISI 316	PART NUMBERS AISI 303
1	End base	0646515	0646702
2	Intermediate base	0646513	0646704
3	Initial base	0646512	0646700
4	Check valve	0519335	0519335
5	Plug	0646254	0646254
6	Sx-Dx bridge element	0646223	0646714
7	Sx bridge element	0646221	0646710
8	Dx bridge element	0646220	0646708
9	Bridge element, single outlet	0646222	0646712
10	White adapter for single outlet	0646250	0646250
11	Yellow adapter for two separate outlets	0646251	0646251
12	Sealing disc	0641791	0641791
13	Viton® O-ring gasket	0018887	0018887

METERING VALVES - FLOW RATES AND SIZES

FLOW RATE FOR OUTLET				
FLOW RATE FOR OUTLET				1 OR 2 OUTLETS
cc.	cu. in	PART NUMBER AISI 316	PART NUMBER AISI 303	SYMBOL
0.04	.0024	0646524	0646716	SMX 04
0.08	.005	0646516	0646717	SMX 08
0.12	.007	0646535	0646725	SMX 12
0.16	.010	0646517	0646718	SMX 16
0.25	.015	0646518	0646719	SMX 25
0.35	.021	0646519	0646720	SMX 35
0.40	.025	0646520	0646721	SMX 40
0.50	.030	0646521	0646722	SMX 50
0.60	.036	0646522	0646723	SMX 60
0.65	.040	0646523	0646724	SMX 65

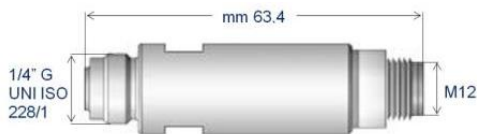


BASIC DIMENSIONS OF ASSEMBLIES				
No.	A		B	
	mm	in	mm	in
3	93,02	3.6	83,02	3.2
4	116,44	4.5	106,44	4.1
5	139,86	5.4	129,86	5.1
6	163,28	6.4	153,28	6.1
7	186,70	7.2	176,70	6.9
8	210,12	8.2	200,12	7.8
9	233,53	9.1	223,53	8.7
10	256,95	10.1	246,95	9.6
11	280,37	10.9	270,37	10.5
12	303,79	11.8	293,79	11.4
13	327,21	12.8	317,21	12.4
14	350,63	13.7	340,63	13.3
15	374,05	14.6	364,05	14.2
16	397,47	15.5	387,47	15.1
17	420,89	16.4	410,89	16.1
18	444,30	17.3	434,30	16.9
19	467,72	18.2	457,72	17.8
20	491,14	19.1	481,14	18.8

DIMENSIONS OF SMX ELEMENTS							
C		D		E		F	
mm	in	mm	in	mm	in	mm	in
5	0.20	44.45	1.74	76	2.99	82	3.23
G		H		L		M	
mm	in	mm	in	mm	in	mm	in
6	0.24	12.5	0.49	30	1.18	56	2.20
N		O		P		Q	
mm	in	mm	in	mm	in	mm	in
63.5	2.50	20.2	0.80	23.42	0.92	20	0.79
R		S		Ø		INLET	OUTLET
mm	in	mm	in	mm	in	1/4"	1/8"
9	0.35	12.5	0.49	7.2	0.28	BSP	BSP



MONITORING DEVICE



To complete the system, it is recommended to use of a controller device capable of verifying the proper operation of the divider package.

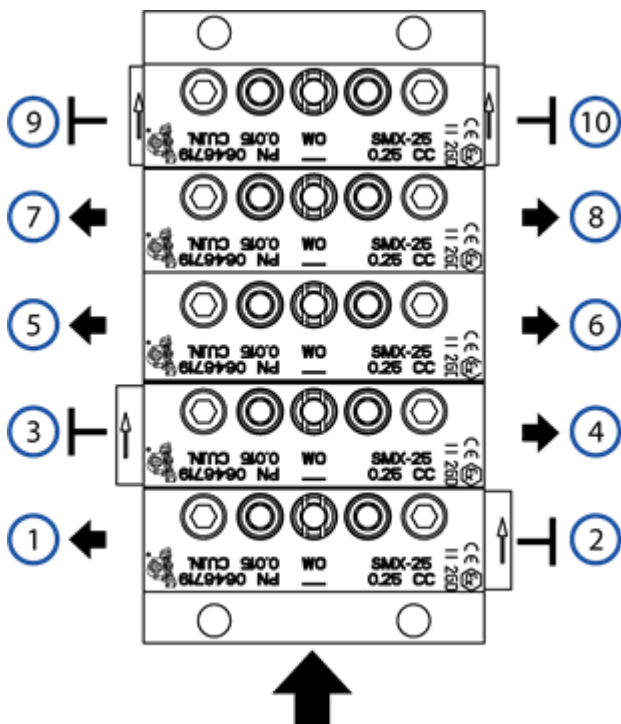
The suggested devices are electric (UltraSensor).

TECHNICAL CHARACTERISTICS	
Material	AISI 316
Max. cycles per minute	1000
Power Supply	8 ÷ 28 V DC
Short circuit protection	✓
Viewer LED	✓
Operating temperature	- 10 °C ÷ + 60
Protection degree	IP 67
Outlet sign	NPN 2A N.O. - PNP 0.7A N.O

ULTRASENSOR (ELECTRIC)		
DESCRIPTION		PART NUMBER
Ultrasensor, stainless steel, AISI 316		1655340

ORDER INFORMATION

WARNING: to determine the outlets, take note that the assembly is seen vertically and the outlets are numbered sequentially starting from the bottom (inlet) from left to right.



Device to merge or to separate outlets

It is possible to add the two flow rates of a single element by substituting the yellow adapter, Part Number **0646251**, with the white adapter, Part Number **0646250**, as illustrated in the drawing below. When the two outlets are connected, remember to close off the one that is not being used with a plug.

